

IN THE SPECIFICATION:

Page 1, after line 2, please insert the following heading: -- Field of the Invention --;

Page 1, after line 6, please insert the following heading: -- Background of the Invention --;

Please delete the paragraphs at Page 1 lines 7-24 and insert the following paragraphs as amended:

It is known to provide air from a compressor of an associated gas turbine engine, for the purpose of cooling the engine turbine structure, ~~[[ie]]~~ i.e. at least the respective first high pressure high temperature stage of nozzle guide vanes, and/or the immediately following high pressure high temperature stage of turbine blades. Cooling is achieved by passing air bled from the compressor into passageways formed in the aerofoils of the respective vanes and blades, then ejecting the air into the gas annulus via slots in the trailing edges of the aerofoils.

Some turbine designs incorporate a stage of turbine blades which lie in a gas annulus~~[[,]]~~ wherein that part of which surrounding the stage of blades~~[[,]]~~ is constructed from a number of segments known as shroud segments. The known method of cooling such a structure is to provide a flow of compressor air over the radially outer surface of the segments, the flow path being defined between those radially outer ~~surface~~ surfaces and a surrounding casing.

Page 1, after line 24, please insert the following heading: -- Summary of the Invention --;

Please delete the paragraph at Page 1 line 27 bridging over to Page 2 line 6 and insert the following paragraph as amended:

According to the present invention a cooled turbine structure comprises adjacent stages of guide vanes and turbine blades, leaked air gathered in a

central spaced volume in a gas turbine engine when operatively associated therewith, wherein said turbine blades are surrounded in spaced relationship by hollow shroud segments that are connected via respective upstream ends to said guide vanes, ~~leaked air from a central spaced volume in a gas turbine engine when operatively associated therewith~~, the passage of said leaked air from said central space volume to said hollow shroud segment interiors being enabled by pipe members extending through said guide vanes which connect said space volume and said hollow shroud segment interiors in flow series and wherein said shroud segments include a leaked air exit aperture in their respective downstream edges.

Page 2, after line 6, please insert the following heading: -- Brief Description of the Drawings --;

Page 2, after line 16, please insert the following heading: -- Detailed Description of the Invention --;

Please delete the paragraph as Page 3 lines 12-27 and insert the following paragraph as amended:

During the said operation of engine 10 air deliberately bled from compressor 12 is passed through pipes 50, only one of which is shown, and which terminate in swirl vanes 52. The majority of the bled air on exiting the swirl vanes 52, flows through passageways 54 and 56 into the interior of the aerofoil of each turbine blade 22 so as to cool them in known manner. The remainder of the bled air leaks through seal 58 to augment the contaminated air in compartment 46. The mixed flow then passes through ~~pipes~~ tubes 44 into the outer compartments 32 in respective shroud segments 28 and thence via holes 38 into the inner compartments 34 to impingement cool the shroud segments 28 inner walls. The mixed flow then passes around pillars 39 which generates turbulence in the flow, thus increasing cooling efficiency and finally exits the shroud segments 28 via slots 60 in their trailing edges into the gas annulus.

Please delete the paragraph at Page 4 lines 3-16 and insert the following paragraph as amended:

If a slam acceleration is needed during operation of engine 10 the resulting surge of fuel into the combustion equipment 14 effects a rapid rise in gas temperature which is felt throughout the turbine system. Turbine blade stage 22 rotates at a greater speed which increases the centrifugal force thereon causing the turbine blades to creep, ~~ie~~ i.e. to extend their lengths. However, guide vanes 20 react to the increased heat by extending even faster thus pivoting shroud segments 28 radially outwards of the engine axis 36 about their downstream ends. To facilitate the pivoting movement the air inlet ends 40 of shroud segments 28 are curved so as to provide point contact only with slots 42. By these means collision between the tips of blades 22 and shroud segments 28 is avoided.